

Date: Wed, 10 Aug 94 04:30:20 PDT
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>
Errors-To: Ham-Digital-Errors@UCSD.Edu
Reply-To: Ham-Digital@UCSD.Edu
Precedence: Bulk
Subject: Ham-Digital Digest V94 #266
To: Ham-Digital

Ham-Digital Digest Wed, 10 Aug 94 Volume 94 : Issue 266

Today's Topics:

 900 MHz FM
 900 MHz spread spectrum systems (2 msgs)
 ??USING MAC WITH KPC-3 AN
 cell sites
 DRSI DPK-9600 to node stack?
 F6FBB Mailing List
 IP address Help (2 msgs)
 Is this the place to talk DSP?
local organizations that help people get acquainted with packet radio
 Need Kam+ to HTX-202 Cable
 Need some help with the design of an Operational Amplifier
 Recommendations on low-power TNC

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Digital Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 5 Aug 1994 05:02:44 GMT
From: ihnp4.ucsd.edu!newshub.sdsu.edu!nic-nac.CSU.net!usc!howland.reston.ans.net!
darwin.sura.net!aurora.LaTech.edu!ems@network.ucsd.edu
Subject: 900 MHz FM
To: ham-digital@ucsd.edu

Can anyone help get the circuits for FM transmitter/receiver in the range of
902-928.

I need the circuits for a project I'm working on.

ems@engr.latech.edu
or
203 homer
Ruston, La 71270

Date: Mon, 8 Aug 1994 23:15:16 GMT
From: news.sprintlink.net!news.dorsai.org!stevalln@uunet.uu.net
Subject: 900 MHz spread spectrum systems
To: ham-digital@ucsd.edu

David R. Wolf (wolf@beta.lanl.gov) wrote:
: lately i've become interested in the level of security actually provided by
: the 900 mhz spread spectrum phones. for instance, could a hacker with a
: pc and a smattering of outboard hardware have a good chance of decoding one's
: 900MHz phone calls?

: does anyone have any details on the ss systems used in, say, the escort
: phones? spreading sequence generator, modulation methods, synchronization
: schemes, etc.? one of the fellows that i talked with at cincinnatti microwave
: suggested that their phones choose a spreading sequence randomly whenever the
: phone gets used. is this true?

My understanding is that these phones use direct sequence spread spectrum.
I was browsing thru a book on this the other day (idly, at the bookstore
while looking for other stuff), and seem to recall reading that dsss is
the easiest mode to sync to. I think you sort of slide your sequence back
and forth over the signal, and when they're synced, the signal gets clear
in an easily detectable way. (Can't remember the details of that, tho).

If you know what you're doing, and have the sequence, it should be easy.

I think there's lots of snake-oil out there involving security of
these phones. When they say "Uses digital spread-spectrum techniques with
64,000 different codes," they may probably be saying that there's one
sequence and 64K access codes to dial out, which is the same as an analog
cordless with 64K security.

-Steve

p.s. There are reports that the audio is transmitted in the clear on 450
MHz. Not sure of the signal level, tho.

Date: Tue, 9 Aug 1994 13:58:00 GMT
From: ihnp4.ucsd.edu!news.cerf.net!gopher.sdsc.edu!nic-nac.CSU.net!
charnel.ecst.csuchico.edu!yeshua.marcam.com!zip.eecs.umich.edu!umn.edu!mr.net!
idss.nwa.com!csinc!chrise@network.ucsd.edu
Subject: 900 MHz spread spectrum systems
To: ham-digital@ucsd.edu

In article <Cu8oLH.11v@dorsai.org>, Steve_Allen <stevalln@dorsai.org> wrote:
>David R. Wolf (wolf@beta.lanl.gov) wrote:
>: lately i've become interested in the level of security actually provided by
>: the 900 mhz spread spectrum phones. for instance, could a hacker with a
>: pc and a smattering of outboard hardware have a good chance of decoding one's
>: 900MHz phone calls?
>

[deletions]

>-Steve
>p.s. There are reports that the audio is transmitted in the clear on 450
>MHz. Not sure of the signal level, tho.
>

yes... I reported this late last week... and am still researching it. My
phone though, is the Tropez 900 DL which is not spread-spectrum but
digitally modulated on single carriers within the 900 MHz band. What I
have found is that there is some leakage of in-the-clear audio in the
430 MHz amateur band from the handset. Others have found and reported
similar signals. I am trying to get someone from VTech (the manufacturer
of the phone) to discuss this with me... but they seem to be having trouble
returning my calls.

Chris

--

Chris Elmquist, N0JCF voice: (612)631-7614
chrise@control.com fax: (612)631-8117

Date: Tue, 02 Aug 94 21:15:47 -0700
From: netcomsv!netcomsv!lavc!lou.meiss@decwrl.dec.com
Subject: ??USING MAC WITH KPC-3 AN
To: ham-digital@ucsd.edu

Back on 08-02-94, Jeff said...

> Thank you for reading this..I have a Mac Classic and a Mac Apple and
> am considering using it with my KPC-3 with a Hostmaster program for
> packet. Right now I am using a PC with the KPC-3 for packet and it wo
> very well..Would this set up with the Mac work better?? Would it be f
> or slower then the PC?. Does the MAC to TNC cable special?? Thanks f
> reading this..Hope you can help..Jeff

Jeff, It really won't make any difference which computer you use. The big difference will be which software you like. That's assuming you are going to use AX-25 Packet. In that mode, the TNC just looks like a Modem to the computer. Matter of fact, I run Procomm when I do AX-25 with my PC. I suppose one difference might be, if you are using an older PC (XT, slow 286) and are unable to run 9600 baud between the computer and TNC, then you might see an increase in the presumed speed with the MAC. AX-25 packet with the KPC-3 is still only 1200 baud on VHF and 300 baud on HF. That won't change no matter what computer you use.

As far as cables go, just about any standard RS-232 Serial cable will work just fine. The only difference would be the connector on the back of the MAC.

Hope this helps and let me know if I can be any more help,

73 de Lou

AMPRnet - wa6epd@wa6epd.ampr.org [44.16.1.24]
Internet - lou.meiss@support.com
AX-25 - wa6epd@wb6wfh.#soca.ca.usa.noam

Date: 10 Aug 1994 02:30:11 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!vixen.cso.uiuc.edu!sdd.hp.com!
hpscit.sc.hp.com!cupnews0.cup.hp.com!cupnews2.cup.hp.com!bmp@network.ucsd.edu
Subject: cell sites
To: ham-digital@ucsd.edu

yctcsl@cerfnet.com wrote:

: Does anyone have any info regarding the rate paid by PacBell (AirTouch) for
: establishing a cell site lease. The offers been made however I'd be interested
to
: find out just what being paid these days.

I'd negotiate for a phone or two with free airtime as part of the deal.
Brian

Date: Tue, 9 Aug 1994 16:22:16 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!newshub.nosc.mil!avalon.chinalake.navy.mil!
gawain.chinalake.navy.mil!jan@network.ucsd.edu
Subject: DRSI DPK-9600 to node stack?
To: ham-digital@ucsd.edu

Hello all!

I need to figure out the mod for the DRSI DPK-9600 TNC so that the serial port talks xlink with TheNet X-1J. I've done this with 3 or so TNC-2s, but I can't figure out where the JMP9 or for that matter, where pin 23 is (it has a DB-9 connector) Anyone offer some hints?

73, jan
kc6uth
jan@archimedes.chinalake.navy.mil

Date: Sun, 7 Aug 1994 21:30:13 -0600
From: ihnp4.ucsd.edu!ucsnews!newshub.sdsu.edu!nic-nac.CSU.net!usc!
howland.reston.ans.net!spool.mu.edu!bloom-beacon.mit.edu!senator-
bedfellow.mit.edu!pschleck@network.ucsd.edu
Subject: F6FBB Mailing List
To: ham-digital@ucsd.edu

Welcome!

You have joined the f6fbb-list@stat.com The purpose of this server is to provide Sysops and Networkers with tricks/tips/help and new software updates concerning the F6FBB bulletin board system. Exchange of UUENCODED files through the server is ok.

Your Sysop for the server is Daniel J. Meredith,
(n7mrp@n7mrp.az.usa.na), (daniel.meredith@aznetig.stat.com).

To Send Mail To Be Distributed To All Subscribers:

f6fbb-list@stat.com

And Send Normal Subject And Text.

To REMOVE Yourself From This Server, Please Send Electronic Mail To:

listserv@stat.com

And Include The Command:

unsubscribe f6fbb-list

As The First Line of Your Message.

To ADD Yourself To This List, Please Send Electronic Mail To:

listserv@stat.com

And Include The Command:

subscribe f6fbb-list

As The First Line of Your Message.

Requests For HELP From A SYSOP - Send E-mail To:

f6fbb-list-request@stat.com

The F6FBB Server has been established to help Sysops and Networkers alike, in providing help and information in a timely manner. Sharing of software and other miscellaneous information via the server is quite alright.

Best Wishes!

Daniel J. Meredith

Listowner F6FBB-LIST@STAT.COM

```
\-----/
Daniel J. Meredith      |Internet: daniel.meredith@aznetig.stat.com
P.O. Box 44563          |   Ax.25: n7mrp@n7mrp.az.usa.na
Phoenix, Arizona       |ListOwner: f6fbb-list@stat.com
      85064-4563        |___| "ALL Comments Are My OWN, NOT My Employer"
      Voice : +1-602-809-7384 |   BELL ATLANTIC MOBILE SYSTEMS
Home & Fax : +1-602-956-2566 | Internet: ba.com
Data PBBS : +1-602-912-0225 |   Banyon: Daniel J. Meredith@CS_TEMPE@BAMASW
```

Editor, HICNet Medical Newsletter

Internet: david@stat.com

FAX: +1 (602) 451-1165

Bitnet : ATW1H@ASUACAD

Date: 6 Aug 94 09:10:00 GMT

From: lll-winken.llnl.gov!overload.lbl.gov!agate!howland.reston.ans.net!gatech!
wa4mei!totrbbs!steve.diggs@ames.arpa

Subject: IP address Help
To: ham-digital@ucsd.edu

Bob,

Here is a recent list of the US IP address coordinators. I deleted the Int'l folks for brevity. Let me know if you need them, too.

SD

AMPRNet IP address coordinators as of 11 July 1994

Corrections and updates to brian@ucsd.edu.

Note: the people listed here have volunteered to issue IP addresses for their areas. They are not paid to do this service; please understand that they are perfectly at ease to deal with coordination responses at a lower priority than the things that matter more, such as job and family. Please be patient when requesting an address.

44.002	Bob Meyer	K6RTV	Calif: Sacramento
44.004	Douglas Thom	N60YU	Calif: Silicon Valley - San Francisco
44.006	Don Jacob	WB5EKU	Calif: Santa Barbara/Ventura
44.008	Brian Kantor	WB6CYT	Calif: San Diego
44.010	Terry Neal	AA6TN	Calif: Orange County
44.012	Steven King	KD7RO	Eastern Washington, Idaho
44.014	John Shalamskas	KJ9U	Hawaii & Pacific Islands
44.016	Jeff Angus	WA6FWI	Calif: Los Angeles - S F Valley
44.017	Dana Myers	KK6JQ	Calif: Antelope Valley/Kern County
44.018	Geoffrey Joy	KE6QH	Calif: San Bernardino & Riverside
44.020	Fred Schneider	K0YUM	Colorado: Northeast
44.022	John Stannard	KL7JL	Alaska
44.024	Bob Donnell	KD7NM	Washington state: Western (Puget Sound)
44.026	Ron Henderson	WA7TAS	Oregon
44.028	Jack Snodgrass	KF5MG	Texas: North
44.030	J Gary Bender	WS5N	New Mexico
44.032	Bdale Garbee	N3EUA	Colorado: Southeast
44.034	Jeff Austen	K9JA	Tennessee
44.036	Doug Drye	KD4NC	Georgia
44.038	Mike Abbott	N4QXV	South Carolina
44.040	Matt Simmons	KG7MH	Utah
44.042	John Martin	KB5GG0	Mississippi
44.044	Bob Wilson	KA1XN	Massachusetts: western
44.046	Stan Wilson	AK0B	Missouri
44.048	Jacques Kubley	KA9FJS	Indiana
44.050	Ron Breitwisch	KC00X	Iowa
44.052	Gary Grebus	K8LT	New Hampshire
44.054	Ralph Stetson	KD1R	Vermont
44.056	Johnathan Vail	N1DXG	Eastern&Central Mass

44.058	Rich Clemens	KB8A0B	West Virginia
44.060	Howard Leadmon	WB3FFV	Maryland
44.062	Jim DeArras	WA40NG	Virginia
44.062	Jon Gefaell	KD4CQY	Virginia (Charlottesville Area)
44.064	Dave Trulli	NN2Z	New Jersey: northern
44.065	Bob Applegate	WA2ZZX	New Jersey: southern
44.066	John DeGood	NU3E	Delaware
44.068.1-32	Bob Foxworth	K2EUH	New York: NYC & Long Island
44.068.64+	Bob Bellini	N2IGU	New York: ENY
44.069	Paul Gerwitz	WA2WPI	New York: WNY
44.070	Gary Sanders	N8EMR	Ohio
44.072	Ken Stritzel	WA9AEK	Chicago - North Ill.
44.073	Chuck Henderson	WB9UUS	South/Central Ill.
44.074	Mark Bitterlich	WA3JPY	North Carolina (east)
44.075	Charles Layno	WB4WOR	North Carolina (west)
44.076	Kurt Freiburger	WB5BBW	Texas: south
44.077	Rod Huckabay	KA5EJX	Texas: west
44.078	Joe Buswell	K5JB	Oklahoma
44.080	Doug Crompton	WA3DSP	Pennsylvania: eastern
44.082	Steven Elwood	N7GXP	Montana
44.084	Bob Ludtke	K9MWM	Colorado: Western
44.086	Reid Fletcher	WB7CJO	Wyoming
44.088	Bill Lyman	N1NWP	Connecticut
44.090	Mike Nickolaus	NF0N	Nebraska
44.092	Pat Davis	KD9UU	Wisconsin, upper peninsula Michigan
44.094	Andy Warner	N0REN	Minnesota
44.096	Don Bennett	K4NGC	District of Columbia
44.098	Brian A. Lantz	K04KS	Florida
44.100	Richard Elling	KB4HB	Alabama
44.102	Jeff King	WB8WKA	Michigan (lower peninsula)
44.104	Charles Greene	W1CG	Rhode Island
44.106	Allan B Dayton	N0KFO	Kentucky
44.108	James Dugal	N5KNX	Louisiana
44.110	Richard Duncan	WD5B	Arkansas
44.112	Bob Hoffman	N3CVL	Pennsylvania: western
44.114	Steven Elwood	N7GXP	N&S Dakota
44.116	Tom Kloos	WS7S	Oregon: NW&Portland,Vancouver WA
44.118	Carl Ingerson	N1DXM	Maine
44.120	unassigned		
44.122	Dale Puckett	K0HYD	Kansas
44.123	Bernie McDonnell	NP2W	Virgin Islands
44.124	David Dodel	WB7TPY	Arizona
44.125.0-126	Earl Petersen	KF7TI	Southern Nevada
44.125.128-254	Bill Healy	N8KHN	Northern Nevada
44.126	Karl Wagner	KP4QG	Puerto Rico

#

44.128 is reserved for testing. Do not use for operational networks.

You may safely assume that any packets with 44.128 addresses are bogons

unless you are using them for some sort of testing

44.128 TEST
#

Top Of The Rock BBS - Lilburn, GA SYSOP: Steve Diggs
UUCP: tottbbs.atl.ga.us Snailmail: 4181 Wash Lee Ct.
Phone: +1 404 921 8687 Lilburn, GA 30247-7407

Date: 9 Aug 1994 09:39:34 -0400
From: noc.near.net!chaos.dac.neu.edu!not-for-mail@uunet.uu.net
Subject: IP address Help
To: ham-digital@ucsd.edu

I'll place the IP address coordination listing into the Boston Amateur
Radio Club archives on oak.oakland.edu.

It'll be in the /pub/hamradio/docs/misc directory under the title ip-coords

73,
Scott

--
Scott Ehrlich, Amateur Radio Callsign: wylz wylz@ka2jxi.ny [AX.25 Packet]
How to reach me: wylz@neu.edu [Internet], wylz@k2cc.ampr.org [TCP/IP Packet]
Boston ARC ftp archives: ftp oak.oakland.edu /pub/hamradio
Boston ARC Web page: <http://www.acs.oakland.edu/barc.html>

Date: 8 Aug 1994 18:15:29 -0700
From: ihnp4.ucsd.edu!galaxy.ucr.edu!library.ucla.edu!agate!barrnet.net!
nntp.crl.com!crl3.crl.com!not-for-mail@network.ucsd.edu
Subject: Is this the place to talk DSP?
To: ham-digital@ucsd.edu

Allen Hall (ahall@ux4.cso.uiuc.edu) wrote:
: Hey guys,

: Just wondering if I should be cross-posting or just posting or what my
: home-brew questions (and technical q's about concepts) about DSP to
: digital.misc?

: Basically, I have come into the ownership of a very nice Analog Devices

: dsp chip, and I am working on making a DSP unit out of it. I am very very
: new to the concepts involved with DSP, and I need as much information as I
: can get.

: So far, I have been posting to .homebrew, but if you think I should post
: some here, please tell me, because I need all the help I can get!

: Thanks for you help and information!

: Allen Hall n9rzc@uiuc.edu

: ps- if you know where I can start, please e-mail me with
: comments/suggestions/ideas

: TNX et 73!

Allen,

Check the comp.dsp news group, it is all DSP.

Also, the faq is at:

 evans.ee.adfa.oz.au:/pub/dsp/dsp-faq.help

If any more questions, email me.

Smitty, NA5K

--

Henry Smith (hbs@crl.com)

Date: 8 Aug 1994 23:08:06 -0500

From: cs.utexas.edu!natinst.com!not-for-mail@uunet.uu.net

Subject: local organizations that help people get acquainted with packet radio

To: ham-digital@ucsd.edu

I'm interested in getting involved in some packet radio and was wondering if
someone could tell me what local organizations that I might be able to get
involved in to meet people who are using this technology and would be
interested in introducing someone else to it.

Also I was wondering if directional dish antennas at the GHz frequencies
wouldn't be best to provide for reuse of bandwidth and use of less power.

Thanks.

mike

Date: 9 Aug 1994 00:38:04 -0400
From: newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@uunet.uu.net
Subject: Need Kam+ to HTX-202 Cable
To: ham-digital@ucsd.edu

I'm looking for a cable to match my Radio Shack 2meter rig
to my Kam Plus....

I'll gladly pay for one.

Matt/N8QNW

Date: 9 Aug 94 00:16:14 CDT
From: ihnp4.ucsd.edu!ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!
vixen.cso.uiuc.edu!newsfeed.ksu.ksu.edu!moe.ksu.ksu.edu!kuhub.cc.ukans.edu!
christos@network.ucsd.edu
Subject: Need some help with the design of an Operational Amplifier
To: ham-digital@ucsd.edu

hello there,

I have a question concerning design of a simple amplifier using
operational amplifiers. I am simply designing a noninverting amplifier with a
gain of 2, that is $R1=R2$ (Closed Loop Gain= $(1+R2/R1)$). No matter what I apply
to the input of the amp the output always saturates to -11 Volts. Even if no
input is applied the output still gives a -11V.
The voltages that I am applying to the Vcc+ and Vcc- of the op amp are +12V and
-12V respectively. I am using the LM 741 opamp for this application.

Does anybody in this group happen to know what the problem might be?

I would appreciate any relevant response.

Please e-mail.

Thanks in advance

Chris

Date: Tue, 9 Aug 1994 00:28:51 GMT

From: newsflash.concordia.ca!nstn.ns.ca!cs.dal.ca!cfn.cs.dal.ca!aa770@uunet.uu.net
Subject: Recommendations on low-power TNC
To: ham-digital@ucsd.edu

Mark Cheeseman (cheese@active.asstdc.com.au) wrote:

: I'm looking for a TNC for portable field applications, so low power
: consumption is a primary consideration. Small physical size would

: The KPC-3 looks like it'll fit the bill, and the Tiny 2 might too,
: should be considering, or anything (bad) I should know about either

: Thanks in advance,
: Mark VK2XGK

Well Mark owning a KPC-3 I can attest that if you select the "leds off "
and setting "cd internal" the tnc does last a long time on 9 volts it
is quite capable of 3-5 day activity depending on how much you are
active. I would say your choice comes down to this if you have a full
laptop then a baycom would do the trick feeding off the computer if you
wanted more features such as mailbox without computer then the kpc 3 is
the way to go. 73's for now hope this helps (--
de VE1BT rob.....

: --

: Mark Cheeseman cheese@active.asstdc.com.au 712/412.0 [+61 2 314 6117]
: PO Box 1287 North Sydney NSW 2015 Ph +61 2 966 1722 Fax +61 2 955 8871

--

Robert Harpelle
Internet address aa770@cfn.dal.ns.ca
paket address VE1BT@#VE1BBS.NS.CA
Dartmouth, Nova Scotia, Canada

End of Ham-Digital Digest V94 #266
